Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Please cancel claim 6 without prejudice.

Please add new claim 23.

Please amend claims 1-5 and 7-18 as indicated below (material to be inserted is in **bold and underline**, material to be deleted is in ~~strikeout~~ or (if the deletion is of five or fewer consecutive characters or would be difficult to see) in double brackets [[ ]]):

Listing of Claims:

1. (Currently Amended) ~~An apparatus~~ **A printhead** comprising:

a substrate;

a first layer disposed adjacent the substrate;

a second layer disposed adjacent the first layer;

[[a]] **an electrically conductive** third layer disposed adjacent the second layer, wherein the third layer contains a gap; ~~and~~

a fuse disposed between the third layer and the first layer, wherein the fuse is electrically coupled to the third layer, and wherein the fuse is located proximate the gap in the third layer;

a dielectric layer disposed adjacent the third layer; and

a fluid barrier layer disposed adjacent the dielectric layer.

2. (Currently Amended) ~~An apparatus as recited in~~ **The printhead of** claim 1, wherein the fuse is a programmable fuse.

3. (Currently Amended) ~~An apparatus as recited in~~ **The printhead of** claim 1, wherein the fuse is composed of polysilicon doped with phosphorous.

4. (Currently Amended) ~~An apparatus as recited in~~ **The printhead of** claim 1, wherein the fuse is composed of tantalum aluminum.

5. (Currently Amended) ~~An apparatus as recited in~~ **The printhead of** claim 1, wherein the fuse is composed of WSiN.

6. (Canceled)

7. (Currently Amended) ~~An apparatus as recited in~~ **The printhead of** claim 1, wherein the third layer is composed of aluminum.

8. (Currently Amended) ~~An apparatus as recited in~~ **The printhead of** claim 1, wherein the fuse provides an electrically conductive path across the gap in the third layer.

9. (Currently Amended) ~~An apparatus as recited in~~ **The printhead of** claim 1, wherein electrical conductivity of the fuse can be substantially eliminated by applying a voltage across the fuse for a predetermined time period.

10. (Currently Amended) ~~An apparatus~~ **A printhead** comprising:

a substrate;

a thermal isolation layer ~~disposed adjacent~~ **adjoining** the substrate;

a first dielectric layer ~~disposed adjacent~~ **adjoining** the thermal isolation layer;

a metal layer ~~disposed adjacent~~ **adjoining** the first dielectric layer;

a fuse disposed in the first dielectric layer and electrically coupled to the metal layer;

a second dielectric layer ~~disposed adjacent~~ **adjoining** the metal layer **opposite the first dielectric layer**; and

a **fluid** barrier layer ~~disposed adjacent~~ **adjoining** the second dielectric layer **to prevent fluid from contacting the metal layer**.

11. (Currently Amended) ~~An apparatus as recited in~~ **The printhead of** claim 10, wherein the metal layer contains a gap proximate the fuse and wherein the gap is filled with material from the second dielectric layer.

12. (Currently Amended) ~~An apparatus as recited in~~ **The printhead of** claim 10, wherein the metal layer contains a gap proximate the fuse and wherein the fuse provides an electrically conductive path across the gap.

13. (Currently Amended) ~~An apparatus as recited in~~ **The printhead of** claim 10, wherein the second dielectric layer includes a layer of a first dielectric material and a layer of a second dielectric material.

14. (Currently Amended) ~~An apparatus as recited in~~ **The printhead of** claim 10, wherein the **fluid** barrier layer prevents fluid from contacting the second dielectric layer.

15. (Currently Amended) ~~An apparatus as recited in~~ **The printhead of** claim 10, wherein the fuse is composed of polysilicon doped with phosphorous.

16. (Currently Amended) ~~An apparatus as recited in~~ **The printhead of** claim 10, wherein the fuse is a programmable fuse composed of tantalum aluminum.

17. (Currently Amended) ~~An apparatus as recited in~~ **The printhead of** claim 10, wherein the fuse is a programmable fuse composed of WSiN.

18. (Currently Amended) An apparatus as recited in claim 10, wherein the metal layer is composed of aluminum.

19. (Withdrawn) A method of generating a fuse structure, the method comprising:

disposing a thermal isolation layer on a substrate;

disposing a first dielectric layer on the thermal isolation layer;

disposing a fuse on the thermal isolation layer, wherein the fuse is separated from the substrate by the thermal isolation layer;

disposing a metal layer on the first dielectric layer wherein the metal layer is electrically coupled to the fuse;

disposing a second dielectric layer on the metal layer;

disposing a barrier layer on the second dielectric layer; and

disposing a nozzle layer on the barrier layer.

20. (Withdrawn) A method as recited in claim 19, wherein the fuse material is polysilicon doped with phosphorous.

21. (Withdrawn) A method as recited in claim 19, wherein disposing a metal layer on the first dielectric layer includes forming a gap in the metal layer in an area proximate the fuse.

22. (Withdrawn) A method as recited in claim 190, wherein disposing a metal layer on the first dielectric layer includes forming a gap in the metal layer in an are proximate the fuse, and wherein the fuse provides an electrically conductive path across the gap.

23. (New) An inkjet printing system including a printhead configured to eject printing fluid, the printhead comprising:

a substrate;

a thermal isolation layer disposed adjacent the substrate;

a first dielectric layer disposed adjacent the thermal isolation layer;

a metal layer disposed adjacent the first dielectric layer;

a fuse electrically coupled to the metal layer to provide an electrically conductive path across a gap in the metal layer, the fuse being disposed between the thermal isolation layer and the first dielectric layer to accommodate expansion of the fuse upon blowing of the fuse;

a second dielectric layer disposed adjacent the metal layer opposite the first dielectric layer;

a printing fluid barrier layer disposed adjacent the second dielectric layer and opposite the metal layer to prevent printing fluid from contacting the metal layer; and

a nozzle layer disposed adjacent the barrier layer to accommodate ejection of printing fluid from the printhead.